Data Source: **EM CDB** Report Number: GEN-01b

Operations/Field Office: Savannah River Print Date: 3/9/2000

0189 HQ ID: Site Summary Level: Savannah River Site

Project SR-IN14 / Restoration of Technical Area Ventilation Systems

General Project Information

Project Description Narratives

Purpose, Scope, and Technical Approach:

This project replaces ventilation system components in the Savannah River Technology Center (SRTC) that have outlived or are near the end of their design life expectancy. The systems affected by this project are located in building 773-A, the Main Laboratory Building at the Savannah River Site (SRS).

This project will resolve the facility ventilation concerns by upgrading the ventilation systems in the critical laboratory areas of 773-A. This project will make the systems safer, more energy efficient and more reliable, thereby allowing the ventilation systems to continue to supply their mission requirements for the next twenty years and beyond.

The project will upgrade the ventilation system in 773-A, Sections B, C, and E. These systems have been in service for nearly 50 years, and are well beyond their original design life. All process systems in Building 773-A Sections B, C, and E shall be monitored and controlled frim the Control Room (C-041). This will include pressure monitors, start/stop switches and system trending capability. System status information shall be electronically accessible to facility operations and engineering personnle from remote PC's and be compatible with the SRTC engineering automation plan.

This project will remove, replace, consolidate, modify, or add the following major equipment in Building 773-A:

- 1. Twenty-four Air Handling Units
- 2. Forty Exhaust and Return/Relief Fans
- 3. One-hundred-sixty-eight HEPA Filter Housings
- 4. Five Motor Control Centers
- 5. Twenty-four Ventilation Control Systems

The work will include the D&R of the exising equipment and replacement with new equipment.

Project Status in FY 2006:

Project will complete construction and start turnover/startup activities in FY 2006

Post-2006 Project Scope:

Complete startup activities and financially complete the line item post 2006.

Project End State

All equipment installed through this line item is turned over to and being operated by operations.

Cost Baseline Comments:

Dataset Name: FY 1999 Planning Data Page 1 of 6

Data Source: **EM CDB** Report Number: GEN-01b

Operations/Field Office: Savannah River Print Date: 3/9/2000

HQ ID: 0189 Site Summary Level: Savannah River Site

Project SR-IN14 / Restoration of Technical Area Ventilation Systems

Project Description Narratives

The cost baseline for this project is a compilation of latest estimates for each subproject's scope of work. As the subprojects mature, estimates are upgraded to reflect current Estimates at Completion.

Due to reductions in the FY 2001 budget and SRS priorities, this project is not shown as funded in FY 2001. This will delay implementation of the line item if not resolved in this budget cycle. The amount unfunded is approximately \$2.0M.

Safety & Health Hazards:

The Infrastructure Program facilitates use of Site general areas and provides for maintenance of common shared services such as roads, bridges, utility facilities, central sanitary facilities and etc. Infrastructure supports facilities that have chemical and radiological hazards, but does not generally participate in their control and monitoring. For Infrastructure, typically only those hazards associated with work at an industrial facility are present.

This project involves entry into contaminated areas, radiation fields, potential exposure to asbestos laden materials and other commercial/industrial hazards associated with construction in nuclear power plants. This project is subject to analysis and controls established under DOE direction and approval.

Safety & Health Work Performance:

Activities and check points are described by the Integrated Management System Description. The conditions and requirements are clearly established and agreed upon prior to the starting of any project and those requirements are contractually binding upon WSRC. The key elements of the WSRC Integrated Safety Program are to define the scope of work, identify and analyze hazards associated with the work, develop and implement hazard controls, perform work within controls, and provide feedback on adequacy of controls and continue to improve safety management. The WSRC Integrated Procedures Management System is the primary mechanism for implementing the objective, principles and functions of the Safety Management System. This system establishes Company-Level, Division-level, and Program-specific procedures consistent with organizational roles, and ensures a consistent, discipline site-wide approach to safety while performing work.

PBS Comments:

Baseline Validation Narrative:

To be validated by DOE HQ on 5/20/1999.

General PBS Information

Project Validated? Date Validated:

Has Headquarters reviewed and approved project?

Date Project was Added: 3/30/1999 **Baseline Submission Date:** 7/3/1999

Dataset Name: FY 1999 Planning Data Page 2 of 6

Data Source: EM CDB Report Number: GEN-01b

Operations/Field Office: Savannah River Print Date: 3/9/2000

Site Summary Level: Savannah River Site HQ ID: 0189

Project SR-IN14 / Restoration of Technical Area Ventilation Systems

General PBS Information

FEDPLAN Project? No

DNFSB CERCLA RCRA AEA UMTRCA DOE Orders Other **Drivers:** State N N Ν Y Y N Ν Ν

Project Identification Information

DOE Project Manager: Nixon J. Peralta

DOE Project Manager Phone Number: 803-725-5967 **DOE Project Manager Fax Number:** 803-725-5968

DOE Project Manager e-mail address: nixon.peralta@srs.gov

Is this a High Visibility Project (Y/N):

Planning Section

Baseline Costs (in thousands of dollars)

| | 1997-2006 Total | 2007-2070 Total | 1997-2070 Total | 1997 | Actual 1997 | 1998 | Actual 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 |
|---|--------------------|--------------------|--------------------|---------------|----------------|---------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| PBS Baseline (current year dollars) | 38,032 | 0 | 38,032 | | | | | | 0 | 0 | 3,890 | 11,640 | 10,800 | 7,990 | 3,712 |
| PBS Baseline (constant 1999 dollars) | 32,820 | 0 | 32,820 | | | | | | 0 | 0 | 3,529 | 10,282 | 9,290 | 6,692 | 3,027 |
| PBS EM Baseline (current year dollars) | 38,032 | 0 | 38,032 | | | | | | 0 | 0 | 3,890 | 11,640 | 10,800 | 7,990 | 3,712 |
| PBS EM Baseline (constant 1999 dollars) | 32,820 | 0 | 32,820 | | | | | | 0 | 0 | 3,529 | 10,282 | 9,290 | 6,692 | 3,027 |
| | 2007 | 2008 | 2009 2010 | 2011- 2015 | 2016- 2020 | 2021- 2025 | 2026- 2030 | 2031- 2035 | 2036- 2040 | 2041- 2045 | 2046- 2050 | 2051- 2055 | 2056- 2060 | 2061- 2065 | 2066- 2070 |

Dataset Name: FY 1999 Planning Data Page 3 of 6

Data Source: EM CDB Report Number: GEN-01b

Operations/Field Office: Savannah River

Print Date: 3/9/2000

Site Summary Level: Savannah River Site

HQ ID: 0189

Project SR-IN14 / Restoration of Technical Area Ventilation Systems

| | 2007 | 2008 | 2009 | 2010 | | | | | 31- 203 35 204 | | | 2051- 2055 | 2056- 2060 | 2061- 2065 | 2066- 2070 |
|---|-------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-------------------|-----------|-----------|---------------|---------------|---------------|---------------|
| PBS Baseline (current year dollars) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PBS Baseline (constant 1999 dollars) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PBS EM Baseline (current year dollars) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PBS EM Baseline (constant 1999 dollars) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Baseline Escalation | Rates | | | | | | | | | | | | | | |
| | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | | |
| | | | | 3.60% | 3.60% | 2.70% | 2.70% | 2.70% | 2.70% | 2.70% | 2.70% | 2.70% | 2.70% | | |
| | 2010 | 2011-2015 | 2016-2020 | 2021-2025 | 2026-2030 | 2031-2035 | 2036-2040 | 2041-2045 | 2046-2050 | 2051-2055 | 2056-2060 | 2061-2065 | 2066-2070 | | |
| | 2.70% | 2.70% | 2.70% | 2.70% | 2.70% | 2.70% | 2.70% | 2.70% | 2.70% | 2.70% | 2.70% | 2.70% | 2.70% | | |

Project Reconciliation

Project Completion Date Changes:

 $\label{lem:previously Projected End Date of Project:} \end{equation}$

Current Projected End Date of Project: 9/30/2006

 $\textbf{Explanation of Project Completion Date Difference \ (if applicable):}$

Project Cost Estimates (in thousands of dollars)

Previously Estimated Lifecycle Cost (1997 - 2070, 1998 Dollars): Actual 1997 Cost: Actual 1998 Cost:

Dataset Name: FY 1999 Planning Data Page 4 of 6

Data Source: EM CDB Report Number: GEN-01b

Operations/Field Office: Savannah River

Print Date: 3/9/2000

Site Summary Level: Savannah River Site

HQ ID: 0189

Project SR-IN14 / Restoration of Technical Area Ventilation Systems

Project Reconciliation

Previously Estimated Lifecycle Cost of Project (1999 - 2070, 1998 Dollars): 0 Inflation Adjustment (2.7% to convert 1998 to 1999 dollars):

Previously Estimated Lifecycle Cost (1999 - 2070, 1999 Dollars):

Project Cost Changes

Cost Adjustments Reconciliation Narratives

Cost Change Due to Scope Deletions (-):

Cost Reductions Due to Efficiencies (-):

Cost Associated with New Scope (+):

Cost Growth Associated with Scope Previously Reported (+):

Cost Reductions Due to Science & Technology Efficiencies (-):

Subtotal: 0

Additional Amount to Reconcile (+): 32,820

Current Estimated Lifecycle Cost (1999 - 2070, 1999 Dollars): 32,820

Milestones

| Milestone/Activity | Field Milestone Code | Original Date | Baseline Date | Legal Date | Forecast Date | Actual Date | EA | DNFSB | Mgmt. Commit. | Key Decision | Intersite |
|-----------------------------|-------------------------|------------------|------------------|---------------|------------------|----------------|----|-------|------------------|-----------------|-----------|
| Achieve Critical Decision 2 | SR-IN14-001 | | 8/31/2000 | | | | | | | Y | |
| Achieve Critical Decision 3 | SR-IN14-002 | | 3/31/2003 | | | | | | | Y | |
| Achieve Critical Decision 4 | SR-IN14-003 | | 9/30/2006 | | | | | | | Y | |

Milestones - Part II

| Milestone/Activity | Field Milestone Code | Critical Decision | Critial Closure Path | Project Start | Project End | Mission Complete | Tech Risk | Work Scope Risk | Intersite Risk | Cancelled | Milestone Description |
|-----------------------------|-------------------------|----------------------|-------------------------|------------------|----------------|---------------------|--------------|--------------------|-------------------|-----------|---------------------------------|
| Achieve Critical Decision 2 | SR-IN14-001 | | | Y | | | 1 | 1 | 1 | | Critical Decision 2 by 08/31/00 |
| Achieve Critical Decision 3 | SR-IN14-002 | | | | | | 1 | 1 | 1 | | Critical Decision 3 by 03/31/03 |

Dataset Name: FY 1999 Planning Data Page 5 of 6

Data Source: EM CDB Report Number: GEN-01b

Operations/Field Office: Savannah River

Print Date: 3/9/2000

Site Summary Level: Savannah River Site

HQ ID: 0189

Project SR-IN14 / Restoration of Technical Area Ventilation Systems

Milestones - Part II

| THICSTORES THE II | | | | | | | | | | |
|-----------------------------|-------------------------|----------------------|-------------------------|------------------|----------------|---------------------|--------------|--------------------|-------------------|---------------------------------|
| Milestone/Activity | Field Milestone Code | Critical Decision | Critial Closure Path | Project Start | Project End | Mission Complete | Tech Risk | Work Scope Risk | Intersite Risk | Cancelled Milestone Description |
| Achieve Critical Decision 4 | SR-IN14-003 | | | | Y | | 1 | 1 | 1 | Critical Decision 4 by 09/30/06 |

Dataset Name: FY 1999 Planning Data Page 6 of 6